Water Quality Update

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Don't Plug Me Up!

Sediment Control Workshop Teaches Pollution Prevention

Sediment, by sheer poundage, tops the roster as public enemy number one on the non-point source pollution most-wanted list. Yet it is an oft misunderstood and seemingly innocuous foe. After all, what's a little dirt going to do?

Make no mistake sediment is no lightweight! It reduces water clarity and fills in spawning grounds. And by altering the aquatic food chain it's presence can have repercussions for the whole aquatic ecosystem.

Construction sites and other large land disturbing activities are often prime contributors to the sediment load reaching our waterways. OSU Engineering Extension has developed a workshop to target those in

*See **Sediment** on page 2*

Inside This Issue

OWRB & SEIC to Create GIS Maps of Water Rights

A plan to create computer generated maps showing water rights in Oklahoma is underway.

The Spatial and Environmental Information Clearinghouse (SEIC) at Oklahoma State University and the Oklahoma Water Resources Board (OWRB) have received funds to create computer maps linked to water rights databases.

These maps will show where the OWRB has issued water permits for stream diversions and well construction.

The Oklahoma Water Resources Research Institute is funding the project with a $20,000 grant from the U.S. Geological Survey and $40,000 in matching state funds.

There are approximately 12,000 water rights permits and 40,000 groundwater well construction sites in Oklahoma.

The locations and records of many of these sites will be recorded on the computer maps using Geographic Information Systems (GIS) methods.

The maps will be connected with other water rights databases at the OWRB allowing other useful information to be known for each location.

By connecting with other water rights databases the user will have access to information such as the name and address of the permit owner, well characteristics, permitted pumping or river diversion amounts, and the regional geology and hydrology.

Interactive graphics will be developed to create specialized maps of the water rights data.

*See **OWRB & SEIC** on page 3*

***Sediment** continued from page 1*

positions to really make a difference such as contractors, government agency personnel, permit writers, field inspectors, engineering consultants and landscape architects.

The workshop, entitled Design of Stormwater, Sediment, and Erosion Control Systems, will be held in Tulsa on July 15-18, 1997 and will cover the technical aspects of permanent and temporary site erosion control planning.

The course has met with much success in the past and has been described as

"Absolutely necessary for practicing civil engineers working to design within EPA requirements and other regulatory constraints."

Credit for the workshop's success is due in part to the dynamic teaching team of Drs. Barfield, Haan, Smolen, and Hays, all nationally distinguished researchers in the fields of erosion prevention and natural resource management.

For more information phone OSU Engineering Extension at (405) 744-5714. ♦

Corps Rethinking Policy of Floodplain Restoration

After decades of relying on concrete channelization for flood control, the U.S. Army Corps of Engineers is doing an about face.

Increasingly, the restoration of natural floodplains is being recognized as the only sensible solution to the problem, and that means a major shift in the approach to rebuilding after a flood.

Major floods this spring in California, the Pacific Northwest and the Ohio Valley have underscored this problem. In California for example, nine people died, more than 120,000 were evacuated, and property damages exceeded $1.7 billion.

The conventional response has been to rebuild devastated communities, usually with the aid of federal and state disaster funds. But the realization is dawning that communities built on a natural floodplain will always be vulnerable to loss and damage wrought by periodic flooding.

"I feel very strongly that the solutions we've been following are not the right solutions," said Walter Yep, chief of planning at the Corps' Sacramento office. "We just need to keep people out of the floodplain."

An indication of the movement in this direction can be seen in the $15 million President Clinton earmarked this spring for the Fish and Wildlife Service to acquire flood-prone land where buyouts are considered more cost effective than reconstruction. At the same time, however, $2 billion in supplemental disaster funds will be used to fund standard rebuilding efforts.♦

- Adapted from *U.S. Water News*, March-April, 1997

Resource Spotlight

Title: Protecting Floodplain Resources: A Guidebook for Communities

Author: FEMA

Published: February 1996

This document, produced by the Federal Emergency Management Agency (FEMA), focuses on local, grass-roots efforts needed to effectively manage and protect the floodplain environment, including wetlands, and wildlife habits.

The publication provides planning guidelines that can be used in any of the approximately 20,000 flood-prone communities in the U.S. to ensure that these ecologically productive and environmentally sensitive area are maintained to carry out the important functions of conveying and storing floodwaters.

Case studies highlight potentially dangerous riverine areas that communities have transformed into community assets, such as parks, through effective hazard mitigation and resource protection measures.

To check out a copy of this publication from our resource collection contact Darlene at (405) 744-5653. Or to obtain your own copy free of charge contact the FEMA distribution center at 1-800-480-2520. ♦

INTERESTING TIDBITS…

CADILLAC DESERT – PBS 4 PART SERIES BEGINS TUESDAY JUNE 24, 1997

CADILLAC DESERT

PART 1: THE HISTORY OF HOW LA GOT ITS WATER
PART 2: THE COLORADO RIVER SYSTEM
PART 3: CENTRAL VALLEY OF CALIFORNIA

LAST OASIS

PART 4: GLOBAL WATER ISSUES

This series should be of interest to anyone whose profession deals with irrigation or water related issues.

ANIMAL WASTE MANAGEMENT CONFERENCE

-PRELIMINARY ANNOUNCEMENT-

PLACE: OKLAHOMA CITY
TIME: NOVEMBER 4-5, 1997

The Oklahoma State Section of the American Water Resources Association (AWRA) is sponsoring this conference which will include both technical and non-technical sessions. A Call for Papers is now being solicited. Further details will be presented as they become available. For further information contact Program Committee Chair John Daniel at (405) 262-5291 Fax: (405) 262-0133

STATE & REGIONAL WATERSHED CONTACTS –THE 1996-1997 NONPOINT SOURCE DIRECTORY

We have several copies available. If you could use one or two or three contact Darlene (see box).

® SUN UP – (7 A.M. ON OETA)

JUNE 23 – VERMICOMPOSTING
JUNE 30 – COUNTY WASTE ISSUES – TRASH COPS
JULY 7 – TIRE & PESTICIDE COLLECTION
JULY 14 – TULSA'S WASTE MANAGEMENT PROGRAMS
JULY 21 – SOLID WASTE RESEARCH INSTITUTE

Series arranged by Sarah Kimball

WATER FACTOIDS

- You can drink more than 4,000 8 oz. glasses of water for the same cost as a 6 pack of soda. (Amer. Water Works Association)
- 75% of the human brain is water and 70% of a living tree is water! (Blue Thumb)

OWRB & SEIC *continued from page 1*

OWRB personnel will be able to display and print specific data for all or part of the State, such as permitted irrigation diversion points along the Canadian River.

"This will greatly streamline our efforts to answer public and legislative inquiries," Jann Hook, information services manager said.

"Our databases are in constant use. We need faster, reliable ways to get specific information out in a very understandable form," she said. "This project will help us to computerize much of our map information."

"The almost instantaneous display of specialized maps at any computer at the OWRB will be a great support for our management decisions and hydrologic investigations," Hook said.

Dr. Jayne Salisbury, director of SEIC said, "we are pleased to share our research and technical skills with the OWRB."

SEIC and OWRB have also joined forces to create GIS–based maps that will indicate the water quality standards for water bodies associated with OWRB permitting activities. [Water quality standards vary by water body according to their designated beneficial use.] Completion of this project is expected for late summer 1998.

For further information contact Jayne Salisbury at (405) 744-8433 or jsalis@seic.lse.okstate.edu

Adapted from an article in Prism Vol. 2(2) March/April 1997.

If you need a copy of any articles, contact Hannah Barbara Fulton at (405) 744-5653

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